

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A low-friction sliding mechanism wherein a low-friction agent composition is interposed between sliding surfaces of a DLC coated sliding member (A) and a sliding member (B), wherein

the DLC coated sliding member (A) is formed by coating diamond-like carbon on a base material;

the sliding member (B) is formed [[with]] of at least one kind of material selected from a group consisting of a metal material, a non-metal material and a coated material obtained by coating a thin film on a surface of the metal material or the non-metal material; and

the low-friction agent composition contains at least one kind selected from a group consisting of an oxygen-containing organic compound (C) and an aliphatic amine compound (D), the oxygen-containing organic compound (C) being at least one kind selected from a group consisting of alcohols, esters, ethers, ketones, aldehydes, carbonates and derivatives thereof,

wherein the oxygen-containing organic compound (C) is contained in the range of 0.05 to 3.0 % mass relative to a total mass amount of the low-friction agent composition, and

wherein the aliphatic amine compound (D) has a hydrocarbon group having 6 to 30 carbon atoms and is contained in the range a of 0.05 to 3.0 % mass relative to a total mass amount of the low-friction agent composition.

2. (Previously Presented) The low-friction sliding mechanism according to claim 1, wherein, in the sliding member (B), the metal material is at least one kind of material selected from a group consisting of a ferrous material, an aluminum alloy material and a magnesium alloy-based material; and the coated material is formed by coating a thin film of at least one kind of material selected from a group consisting of DLC, TiN and CrN.

3. (Previously Presented) The low-friction sliding mechanism according to claim 1, wherein the coated DLC has a hydrogen content of 20 atomic percent or less.

4-9. (Canceled)

10. (Currently Amended) A method of reducing a friction, comprising:
supplying a low-friction agent composition containing at least one kind selected from the group consisting of an oxygen-containing organic compound (C) and an aliphatic amine compound (D) on sliding surfaces of a DLC coated sliding member (A) ~~formed by coating diamond-like carbon and a sliding member (B) formed of at least one kind of material selected from a group consisting of a metal material, a non-metal material and a coated material obtained by coating a thin film on a surface of the metal material or the non-metal material so as to lubricate the sliding surfaces,~~

wherein the DLC coated sliding member is formed by coating diamond-like carbon on a base material,

wherein the sliding member (B) is formed of at least one kind of material selected from a group consisting of a metal material, a non-metal material and a coated material obtained by coating a thin film on a surface of the metal material or the non-metal material so as to lubricate the sliding surfaces,

wherein the oxygen-containing organic compound (C) is at least one kind selected from a group consisting of alcohols, esters, ethers, ketones, aldehydes, carbonates and derivates thereof,

wherein the oxygen-containing organic compound (C) is contained in the range of 0.05 to 3.0 % mass relative to a total mass amount of the low-friction agent composition,
and

wherein the aliphatic amine compound (D) has a hydrocarbon group having 6 to 30 carbon atoms and is contained in the range of 0.05 to 3.0 % mass relative to a total mass amount of the low-friction agent composition.

11. (Canceled)

12. (Previously Presented) A manual transmission characterized by using the low-friction sliding mechanism according to claim 1.

13. (Previously Presented) A final reduction gear unit characterized by using the low-friction sliding mechanism according to claim 1.

14. (Previously Presented) A low-friction agent composition that is used in the low-friction sliding mechanism according to claim 1.

15. (Previously Presented) A low-friction agent composition that is used in the friction reduction method according to claim 10.

16. (Currently Amended) A low-friction sliding mechanism wherein comprising a low-friction agent composition is interposed between sliding surfaces of a DLC coated sliding member (A) and a sliding member (B), wherein;

the DLC coated sliding member (A) is formed by coating diamond-like carbon on a base material, [[;]]

the sliding member (B) is formed of at least one kind of material selected from a group consisting of a metal material, a non-metal material and a coated material obtained by coating a thin film on a surface of the metal material or the non-metal material, ;and

the low-friction agent composition contains at least one kind selected from a group consisting of an oxygen-containing organic compound (C) and an aliphatic amine compound (D), the oxygen-containing organic compound (C) being at least one kind selected from a group consisting of alcohols, esters, ethers, ketones, aldehydes, carbonates and derivatives thereof,

wherein the coated DLC has a hydrogen content of 10 atomic percent or less,

wherein the oxygen-containing organic compound (C) is contained in the range of 0.05 to 3.0 % mass relative to a total mass amount of the low-friction agent composition, and

~~wherein~~ the aliphatic amine compound (D) has a hydrocarbon group having 6 to 30 carbon atoms and is contained in the range of 0.05 to 3.0 % mass relative to a total mass amount of the low-friction agent composition.

17. (Currently Amended) A low-friction sliding mechanism ~~wherein~~ comprising a low-friction agent composition is interposed between sliding surfaces of a DLC coated sliding member (A) and a sliding member (B), wherein:

the DLC coated sliding member (A) is formed by coating diamond-like carbon on a base material, [[;]]

the sliding member (B) is formed of at least one kind of material selected from a group consisting of a metal material, a non-metal material and a coated material obtained by coating a thin film on a surface of the metal material or the non-metal material, ;and

the low-friction agent composition contains at least one kind selected from a group consisting of an oxygen-containing organic compound (C) and an aliphatic amine compound (D), the oxygen-containing organic compound (C) being at least one kind selected from a group consisting of alcohols, esters, ethers, ketones, aldehydes, carbonates and derivatives thereof,

~~wherein~~ the coated DLC has a hydrogen content of 0.5 atomic percent or less,

~~wherein~~ the oxygen-containing organic compound (C) is contained in the range of 0.05 to 3.0 % mass relative to a total mass amount of the low-friction agent composition, and

~~wherein~~ the aliphatic amine compound (D) has a hydrocarbon group having 6 to 30 carbon atoms and is contained in the range of 0.05 to 3.0 % mass relative to a total mass amount of the low-friction agent composition.

18. (Currently Amended) A low-friction sliding mechanism ~~wherein~~ comprising a low-friction agent composition is interposed between sliding surfaces of a DLC coated sliding member (A) and a ~~eliding~~ sliding member (B), wherein:

the DLC coated sliding member (A) is formed by coating diamond-like carbon on a base material, [[;]]

the sliding member (B) is formed of at least one kind of material selected from a group consisting of a metal material, a non-metal material and a coated material obtained by coating a thin film on a surface of the metal material or the non-metal material, ;and

the low-friction agent composition contains at least one kind selected from a group consisting of an oxygen-containing organic compound (C) and an aliphatic amine compound (D), the oxygen-containing organic compound (C) being at least one kind selected from a group consisting of alcohols, esters, ethers, ketones, aldehydes, carbonates and derivatives thereof,

wherein the coated DLC is made of a-C diamond-like carbon that does not contain hydrogen,

wherein the oxygen-containing organic compound (C) is contained in the range of 0.05 to 3.0 % mass relative to a total mass amount of the low-friction agent composition, and

wherein the aliphatic amine compound (ID) has a hydrocarbon group having 6 to 30 carbon atoms and is contained in the range of 0.05 to 3.0 % mass relative to a total mass amount of the low-friction agent composition.

19-23. (Cancelled)

24. (New) A low-friction sliding mechanism wherein a low-friction agent composition is interposed between sliding surfaces of a DLC coated sliding member (A) and a eliding member (B), wherein:

the DLC coated sliding member (A) is formed by coating diamond-like carbon on a base material,

the sliding member (B) is formed of at least one kind of material selected from a group consisting of a metal material, a non-metal material and a coated material obtained by coating a thin film on a surface of the metal material or the non-metal material,

the low-friction agent composition comprises an ester, the ester comprising at least one kind selected from the group consisting of glycerin monooleate, glycerin dioleate, sorbitan monooleate, sorbitan dioleate, and any combination of these, and

the oxygen-containing organic compound (C) is contained in the range of 0.05 to 3.0 % mass relative to a total mass amount of the low-friction agent composition.